

## SEQUENCE LISTING

## SEQ ID 1

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## SEQ ID 2

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## SEQ ID 3

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**SEQ ID 4**

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**SEQ ID 5**

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**SEQ ID 6**

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ECQSAIKPLKGVKVPAGVDVITEYVKACDGIGGAMHKAMLMQAAMRGLTGGQVRTFGRKCYNCGQIGHLKRNCPVLNKQNIINQAITARNKKPSGLC  
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**SEQ ID 7**

MGQTKSKIISKYASYLSFIKILLKRGVVKSTKNLIKLFQIIIEQFCPWFEQGTSDLKDWKRIGKELKQAGRKNIIPLTVWNDWAIKAALEPFQT  
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**SEQ ID 8**

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MLMAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNKQNIITQATTGREPPDLCPCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPPAPQQT  
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**SEQ ID 9**

MGQTKSKIISKYASYLSFIKILLKRGVVKSTKNLIKLFQIIIEQFCPWFEQGTDLKDWKRIGKELKQAGRKNIIPLTVWNDWAIKAALEPFQT  
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PQKQVKENKTQPPVAYQYWPAPLQYRPPESQYGYPMPPAPQGRAPYPQPTTRRLNPTAPPSSRQGSKLHEIIDKSRKEGDEAWQFPVTLPEMPP  
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**SEQ ID 10**

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**SEQ ID 11**

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**SEQ ID 12**

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**SEQ ID 13**

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**SEQ ID 14**

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GRQFEGLVDTGADVSIIALNQWPNWPKQKAVTGLVIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPNLWGRDLLQQWGAEITMPAPSYSP  
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**SEQ ID 15**

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GCCATCCACCAAGAAGGACAGGCCCACTTGGGCACAATAAAGAAAGCTGACGCAAGTTAGCTACAAAATATCTAGAGAACACAAAGGTGACACAA  
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**SEQ ID 16**

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TTGGATCAAAATAGCTACATTAATCGGTGACAGAAATACGAATAATAAAATTTATGTGGGAATGACCCAGACAAAATAGTTGCTCCTTTAACCAGG  
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CTTCCAGTTCTTAAATTGACTACTTGGATTCTACCTAAATTCACAGAGCTGAACCTTTAGAAAATGCTCTAACAGTATTTACTGATGGTTCCAGC  
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TACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAATATAGCAT  
GGATGATCAGTTAAACAGCTATTCAATTTATTACAACAACTGTAAGAAAAGAAATTTCCCATTTTATATTACACATATTCGAGCACACACTAAT  
TTACCAGGGCCTTTGACTAAAGCAATGAACAAGCTGACTTACTGGTATCATCTGCACTCATAAAGCACAAGAACTTCATGCTTTGACTCATGTAA  
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CTGTAATGGGAGTTCCAGAAAAATCAAACTGACAATGGACCAGGATATTGTAGTAAAGCTTTCCAAAAATCTTAAGTCAGTGGAAAAATTCACA  
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CAGATGAAGTTGCCATCCACCAAGAAGGACAGCGCCCACTTGGGCACAATAAAGAAAGCTGACGCAAGTTAGCTACAAAATATCTAGAGAACACAA  
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**SEQ ID 17**

ATGGCATTAAAGTCCCACTGAGGCTGAAAAAATCAAAAAAGAAAAGGAATAGGGCATCCTTTTTAGAGCGGTCACTGTAGAGCCTCCAAAAC  
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**SEQ ID 18**

ATGGGGCCTCTCCAACCCGGGTTGCCCTCTCCGGCCATGATCCCAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC  
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GCCTCTATACCTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTACTTCTGCAAGAACATCTTACTGGTAAAAAGAACAGCCACATGAAG  
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CCAGTCACATGGATGGATAATCCTATAGAAGTATATGTTAATGATAGTATATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAACCTGAGG  
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CAGTCTAACAGTTCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAAACCACTCCAGACTATAACCTGT  
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GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAGATAATCTCACTTTAGACATTTCCAAATTTAAAGAACAAATTTTCGAA  
GCATCAAAAGCCCATTTAAATTTGGTGCCAGGAATGAGGCAATTTGAGGAGTTGCTGATGGCCTCGCAATCTTAACCTGTCACTTTGGGTTAAGA  
CCATTTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCTGTTTGTCTGTTTGTAGTCTGCAGGTGTACCCAACAGCTCCGAAGAGA  
CAGCGACCATCGAGAACGGGCCATGATGACGATGGCGGTTTTGTGCAAAAGAAAGGGGAAATGTGGGAAAAAGCAAGAGAGATCAATTTGTTACT  
GTGCTGTGTAG

**SEQ ID 19**

MLTDLRAVNAVIFPMGLPQLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGLMNSPTICQTFVGRALQ  
PVREKFSDCYIIHCIDDLCAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFIYLMQIENRKIKPQKIEIRKDTLKTINDFKLLGDINWI  
RPTLGIPTYAMSNLFSILRGSDLSNRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIIFATAHSPTGIIIIQNTDLVIEWSFLPHSTVTKFTFLY



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LDQIATLIGQTRLRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGS  
NGKAAITGPKERVIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVQATRDVETALIKYSMDQLNQLFNLLQQTVRKRNFPHYITHIRAHNT  
LPGPLTKANEQADLLVSSALIKAEQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYV  
HVTVDITYSHFIWATCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQQAIVERTNRTLKTQLVKQKEGG  
DSKECTTPQMQLNLALYTLNLFNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDSKNKTWEIGKVIWGRGFACVSPGENQLPVWIPTRHLKFYNEP  
IRDAKSTSAETETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSCS

**SEQ ID 20**

MGPLQPLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMNSPTICQTFVGRALQPVREKFSDCYIIHY  
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FSILRGSDLSNQRILTEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPGTGIIQNTDLVEWSFLPHSTVKTFITLYLDQIATLIGQTRLR  
ITKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGLIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGSNGKAAITGPKERV  
KTPYQSAQRDELAVAVITVLQDFDQPINIISDSAYVQATRDVETALIKYSMDQLNQLFNLLQQTVRKRNFPHYITYIRAHNTLPGPLTKANEQADL  
LVSSALIKAEQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDITYSHFIW  
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLNL  
ALYTLNLFNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVIWGRGFACVSPGENQLPVWIPTRHLKFYNEPIGDAKRASTEMVT  
PVTWMDNPIEIVYVNDISIWVPGPIDDRCPAKPEEEGMMINISIGYRPPICLGRAPGCLMPAVQNWLVLEVPTVSPISRFTYHVMSCMSLRPRVNYLQD  
FSYQSRSLKFRPKGKPCPEIKPKESKNTFVLVWEECVANSVILXNNEFGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVDSDLTESLKHKKHKLQ  
SFYPWEWEGEKISTPRPKIVSPVSGPEHPELWRLTVASHHRIWISGNQLETRDCKPFYTVDLNSSLTVPLQSCVKPPYMLVGNIVIKPDSQITC  
ENCRLLTICIDSTFNWQHRIILVRAREGVWIPVSMRDPWEASPSVHILTEVLKGVILNRSKRIFTLIAVINGLIAVTATAAVAGVALHSSVQSNVFN  
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRILMSLEHFRQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLEQIFE  
ASKAHLNLPVGTETAIAGVADGLANLNPVTWVKITGSTSIINLILILVCLFCLLLVCRCTQQLRRSDHREAMMTMAVLKSRKGGNVGKSKRDQIVT  
VSV

**SEQ ID 21**

NKSRKRRNRRESLLGAATVEPPKPIPLTWKTEKPVWVNWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFVIQKSGKWRMLTDLRAVNAVIO  
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CIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFIHYLMQIENRKIKPKQIEIRKDTLKTLDNFQKLLGDINWIRPTLGIPTYAMSN  
LFSILRGSDLSNQRILTEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPGTGIIQNTDLVEWSFLPHSTVKTFITLYLDQIATLIGQTRL  
RIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGSNGKAAITGPKERV  
IKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVQATRDVETALIKYSMDQLNQLFNLLQQTVRKRNFPHYITHIRAHNTLPGPLTKANEQAD  
LLVSSALIKAEQELHALTHVNAAGLKNKFDVTWKQAKDIVQHCTQCQVHLPTQEAGVNPRGLCPNALWQMDVTHVPSFGRLSYVHVTVDITYSHFIW  
TCQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKISHTTGIPYNSQQAIVERTNRTLKTQLVKQKEGGDSKECTTPQMQLN  
LALYTLNLFNIYRNQTTTSAEQHLTGKKNSPHEGKLIWWKDNKNKTWEIGKVIWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKSTSAETE  
TSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSCS

**SEQ ID 22**

ATGAACCCATCAGAGATGCAAGAAAGACACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGT  
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GAACACAAAGGTGACACAAACCCAGAGAGTATGCTGCTGCGAGCCTTGATGATGTATCAATGGTGGAAGTCTCCCTATGCTGCGAGGAGCAGCT  
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GTGTATGGGTACCTGGCCCCATAGATGATCGCTGCCCTGCCAACTGAGGAAGAAGGATGATGATAAATATTTCCATTGGGTATCATTATCTCTC  
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CAGGAGTTGCTGATGGCTCGCAATCTAACCTGTCACCTTGGGTTAAGACCATTTGGAAGTACTACGATTATAAATCTCATATTAACTCTGTGTG  
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**SEQ ID 23**

ATGCAAGAAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAATGGTGACGTCAGAAGAACAGATGA  
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ACAAACCCAGAGAGTATGCTGCTTGCAGCCTTGATGATTGTATCAATGGTGGTAAAGTCTCCCTATGCTGCAGGAGCAGCTGCAGCTAACTATAACC  
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GCCCCATAGATGATCGCTGCCCTGCCAACCTGAGGAAGAAGGGATGATGATAAATATTCCATTTGGGTATCATTATCCTCTATTGCTAGGGAG  
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GAAAGTTTACAGCAAAACATAAGCATAAAAAATTGCAGTCTTTCTACCCCTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAAAAATAGTAA  
GTCTCTTTCTGGTCTGAACATCCAGAATTATGGAGGCTTACTGTGGCTCACACCACATTAGAATTTGGTCTGGAATCAAACTTTAGAAACAAG  
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AATGTGGGAAAAGCAAGAGAGATCAGATTGTTACTGTGTCTGTAG

**SEQ ID 24**

GTCACATGGATGATAATCCTATAGAAGTATATGTTAATGATAGTGTATGGGTACCTGGCCCCACAGATGATCGCTGCCCTGCCAAACCTGAGGAAG  
AAGGGATGATGATAAATATTTCATTTGTATCGTTATCCTCTATTGCTTAGGGAGAGCACCAGGATGTTTAAATGCCTGCAGTCCAAAATTTGGTT  
GGTAGAAGTACCTACTGTCTAGTCTTAACAGTAGATTCACTTTATCACATGGTAAGCGGGATGTCACCTCAGGCCACGGGTAAATTTATTAAGACTTT  
TCTTATCAAAGATCATTAATAATTTAGACCTAAAGGGAACCTTGCCCCAAGGAAATTTCCAAAGAATCAAAAATACAGAAGTTTGTAGTTGGGAAG  
AATGTGTGGCAATAGTGGGTGATATTACAAAACATGAATTCGGAATTTATAGATTGGGCACCTCGAGGTCAATTTTACCACAATTGCTCAGG  
ACAACTCAGTCGTGTCCAAGTGCACAAGTGCAGTCCAGTGTGATAGCGACTTAACAGAAAGTCTAGACAAACATAAGCATAAAAAATTCAGTCT  
TCTACCCCTTGGGAATGGGGAGAAAAAGGAATCTCTACCCCAAGACCAGAAATAAAGTCTGTTTCTGGTCTGAACATCCAGAATTATGGAGGC  
TTTGGCTGACACCACATTAGAATTTGGTCTGGAATCAAACTTTAGAAACAAGAGATCGTAAGCCATTTTATACTATCGACCTAAATTCAGTCTA  
ACGGTCTCTTTACAAAGTTGCGTAAAGCCCTCTTATATGCTAGTTGTAGGAATATAGTTATTAAACAGACTCCCAACTATAACCTGTGAAAAT  
GTAGATTGTTTACTTGCATTGATTCAACTTTTAATTGGCGGCACCGTATCTGCTGTGTAGAGCAAGAGAGGGCGTGTGGATCTCTGTGTCCGTGGA  
CTGACCGTGGGAGGCCCTCGCCATCCATCCATATTTGACTGAAGTATTAAGACATTTTAAATAGATCCAAAAGATTCAATTTTACCTTAATTGCA  
GTGATTATGGGATTAATTGTCAGTACAGCTACGGCTGCTGTGGCAGGAGTTGCATTGCACCTCTTCTGTTCTAGTCGGTAACTTTGTTAATGATTGGC  
AAAAGAATCTACAAGATTGTGGAATTCACAATCTAGTATTGATCAAAAATTTGGCAATCAAAATTAATGATCTTAGACAACTGTCAATTTGGATGG  
AGACAGACTCATGAGCTTAGAACATTGTTCCAGTTACAGTGTGACTGGAATACGTCAGATTTTGTATTACCCCCAAATTTATAATGAGCTGAG  
CATCATGGGAGATGGTTAGAGGAGTACAGCTTAAATAGTCAAGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAATAAACAATTTTCCGAAGCATCA  
AAGCCCATTTAAATTTGATGCCAGGAAGTGGGCAATTCAGGAGTTGCTGATGGCTCGCAATCTTAACCCGTGCTACTTGGGTTAAGACCATCGG  
AAGTACTATGATTATAAATCTCATATTAATCCTTGTGTGCTGTTTTGTCTGTTGTAGTCTGCAGGTGTACCAACAGCTCCGAAGAGACAGCGAC  
CATCGAGAACGGGCCA

**SEQ ID 25**

ATGGGGCTCTCCAACCCGGTTGCCCTCTCCGGCCATGATCCCAAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC  
CTCTGGCAGAGCAGGATTGTGAAAAATTTGCCCTTTACTATACAGCCATAAATAAAGAACAGCCACCAGGTTTCACTGGAAAGTGTACCTCA  
GGGAATGCTTAATAGTCCAACATTTTGTGACACTTTTGTAGGTGAGCTCTTCAACAGTGAGAGAAAAGTTTTAGACTGTTATATTATTCATTAT  
ATTGATGATATTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGGCAATAG  
CATCCGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAAATAGAAAAATTAAGCCACAAAAATAGAAATAAGAAAAGA  
CACATTAACAACTAAATGATTTTCAAAAATTAAGGAGATATTAATTGGATTTCGGCAACTCTAGGCATTCTTACTTATGCCATGTCAAAATTTG  
TCTCTATCTTAAAGAGGAGACTCAGACTTAAATAGTCAAGAAATTAATACCCAGAGGCAACAAAGAAATTAATAGTGGAAAGAAAAATTCAGT  
CAGCGCAATAAATAGAAATAGATCCCTTAGCCCCACTCCAACCTTTGATTTTTGCCACTGCACATTCTCCAACAGGCATCATTATCAAAATACTGA  
TCTTGTGGAGTGGTCATTCTCTCACAGTACAGTTAAGACTTTTACATTGTACTTGGATCAATAGCTACATTAATCGGTGACAGAAATACGA  
ATACAAAATTAATGTGGAATGACCCAGACAAAATAGTTGTCCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTTGGTGCATGGCAGA  
TTGCTCTTGCTAATTTGTGGGACTTATTGATAATCATTACCCAAAAACAAGATCTTCCAGTTCTTAAATTTGACTACTTGGATTCTACCTAAAAT  
TACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTACTGATGGTTCCAGCAATGGAAAAGCAGCTTACACAGGGCCGAAAGAACGAGTAATC  
AAAACCTCATATCAATCGGCTCAAAGAGACGAGTTGGTTGCAGTCATTACAGTGTACAAGATTTTGACCAACCTATCAATATTATATCAGATTCTG  
CATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAATATAGCATGGATGATCAGTTAAACAGCTATTCAATTTATTACAACAAAC

TGTAAGAAAAAGAAATTTCCCATTTTATATTACTTATATTCGAGCACACACTAATTTACCAGGGCCTTTGACTAAAGCAAATGAACAAGCTGACTTA  
CTGGTATCATCTGCACTCATAAAGCACAAGAACTTCATGCTTTGACTCATGTAATGCAGCAGGATTAAAAACAAATTTGATGTCACATGGAAC  
AGGCAAAAGATATTGTACAACATTGCACCCAGTGTCAAGTCTTACACCTGCCACTCAAGAGGCAGGAGTTAATCCAGAGGTCTGTGCTCCTAATGC  
ATTATGGCAAAATGGATGTCACGCATGTACCTTCATTGGGAAGATTATCATATGTTTACAGTTGATACTTATTCACATTTTCATATGGGCAACT  
TGCCAAACAGGAGAAAGTACTTCCCATGTTAAAAACATTTATTGTCTTGTGTTTGTCTGTAATGGGAGTTCCAGAAAAATCAAACACTGACAATGGAC  
CAGGATATTGTAGTAAAGCTTTCCAAAAATTTCTAAGTCAGTGGAAAAATTTACATACAACAGGAATTCCTTATAATTTCCCAAGGACAGGCCATAGT  
TGAAAGAATAATAGAACTCAAACTCAATTAGTTAAACAAAAAGAGGGGAGACAGTAAGGAGTGTACCCTCTCAGATGCAACTTAATCTA  
GCACTCTATACTTTAAATTTTTTAAACATTTATAGAAATCAGACTACTTCTGTCAGAACACATCTTACTGGTAAAAAGAACAGCCCATGAAG  
GAAACTAATTTGTTGGGAGATAATAAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTTGCTTGTGTTTCACCAGGAGA  
AATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTCTACAATGAACCATCGGAGATGCAAGAAAGGGCCTCCACGGAGATGGTAACA  
CCAGTCACATGGATGGATAATCCTATAGAAATATATGTTAATGATAGTATATGGGTACCTGGCCCATAGATGATCGTGGCCCTGCCAAACCTGAGG  
AAGAAGGGATGATGATAAATATTTCCATTGGGTATCGTTATCCTCCTATTTGCTTAGGGAGACACAGGATGTTTAAATGCCTGCAGTCCAAATTTG  
GTTGGTAGAAGTACCTACTGTCCATCCATCAGTAGATTCACTTATACATGGTAAAGCGGATGTCACTCAGGCCACGGGTAATTTATTTACAAGAC  
TTTTCTTATCAAAGATCATTAATTTTACACCTAAAGGGAACCTTGCCCCAAGGAAATTTCCAAAGAATCAAAAAATACAGAAGTTTTAGTTTGGG  
AAGAATGTGTGGCAATAGTGGCGTGATATTATAAAACAATGAATTTGGAATATTATAGATTGGGCACCTCGAGGTCAATTTACCACAATTGCTC  
AGGACAACTCAGTCGTGTCCAAGTGCACAAGTGAGTCCAGCTGTTGATAGCGACTTAACAGAAAGTTTAGACAAACATAAGCATAAAAATTTGAG  
TCTTTTACCTTGGGAATGGGAGAAAAAGGAATCTTACCCCAAGACAAAAATAGTAAGTCTGTTTCTGCTCCTGAACATCCAGAATTATGGA  
GGCTTACTGTGGCCTCACACCACATTAGAATTTGGTCTGGAATCAAACTTTAGAAACAAGAGATTGTAAGCCATTTTATACTGTGACCTAAATTC  
CAGTCTAACAGTTTCTTTACAAAGTTGCGTAAAGCCCCCTTATATGCTAGTTGTAGGAAATATAGTTATTAACCAGACTCCAGACTATAACCTGT  
GAAATTTGTAGATTGCTTACTTGCATTGATTCACTTTTAAATTGGCAACACCGTATTCTGCTGGTGAGAGCAAGAGAGGCGGTGGATCCCTGTGT  
CCATGGACCGACCGTGGGAGGCTCACCATCCGTCCATATTTTACTGAGTATTAAGAGTGTTTTAAATAGATCCAAAGATTCAATTTTACTTT  
AATTGCAGTGATTATGGGATTAATGTCAGTACAGCTACGGCTGCTGTAGCAGGAGTTGCATTGCACCTCTTCTGTTTCACTCAGTAACTTTGTTAAT  
GATTGGCAAAAGAAATTTCTACAAGATTGTGAATTCACAATCTAGTATTGATCAAAATTTGGCAATCAAAATTAATGATCTTAGACAACTGTCATTT  
GGATGGGAGACAGACTCATGAGCTTAGAACATCGTTTCCAGTTACAATGTGACTGGAATACGTCAGATTTTGTATTACACCCCAATTTATAATGA  
GTCTGAGCATCACTGGGACATGGTTAGACGCCATCTACAGGGAAGAGAAGATAATCTCACTTTAGACATTTCCAAATTAAGAAACAAATTTTCGA  
GCATCAAAAGCCCATTTAAATTTGGTGGCAGGAAGTGGAGGCAATTGAGGAGTTGCTGATGGCCTCGCAATCTTAACCTGTCACTTGGGTTAAGA  
CCATTGGAAGTACATCGATTATAAATCTCATATTAATCCTTGTGTGCTGTTTGTCTGTTGTTAGTCTGCAGGTGTACCAACAGCTCCGAAGAGA  
CAGCGACCATCGAGAAGCGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAGGGGAAATGTGGGAAAGCAAGAGAGATCAAAATGTTACT  
GTGCTGTGTAG

**SEQ ID 26**

MQRKAPRRRRHRNRAPLTHKMNKMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPESMLLAALMIVSMVSLPMPAGAAAANYT  
YWAYVPFPLIRAVTWMDNPTEVYVNDVSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVVEVPTVSPICRFTYHVMVSG  
MSLRPRVNYLQVRSYFQVQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGSSNGKAAATGPKRVI  
ESLDKHKHKLQSFYFWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHRIWVSGNQTLERDRKPFYITDNLSSLTVPQLQSCVKPPYMLVVG  
IVIKPDSQITTCENRLLTCTIDSTFNWQHRIILVRAREGVWIPVMDRPWEASPSVHILTEVLKGVNRSKRFIPTLIIVIMGLIIVTATAAVAGVA  
LHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLT  
LDISKLEQIFEASKAHLNLPVGTAEIAGVADGLANLNPVTWVKITIGSTTIINLILILVCLFCLLLVCRCTQQLRRSDHRRERAMTMAVLSKRKGG  
NVGSKRDQIVTVSV

**SEQ ID 27**

MGPLQPLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMNSPTICQTFVGRALQPVREKFSDCYIIHY  
IDDLCAAEKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFFHYLGMQIENRKIKPKQKIEIRKDTLKLNDQKLLGDINWIRPTLGIPTYAMSNL  
FSILRGDSLDNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIQNTDLVIEWSFLPHSTVKTFTLYLDQIATLIGQTRLR  
ITKLCGNDPKIVVPLTKEQVRQAFINSGAWQIGLANFVGLIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGSSNGKAAATGPKRVI  
KTPYQSAQRDELVAIVTVLQDFDQPINIISDSAYVQATRDVETALIKYSMDQDLNQLFNLLQQTVRKRNFPPYITYIRAHTNLPGLPTKANEQADL  
LVSSALIKAQELHALTHVNAAGLKNKFDVWTKAQKDIVQHTCQCVLHLPTQEAGVNRGLCPNALWQMDVTHVPSFGRISYHVTVDTYSHFIWAT  
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNPGYCSKAFQKFLSQWISHTTGIYPNSQQAIVERTNRILTQVLVKQKEGDSKECTTPQMQLNL  
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGLIWWKDNKNKTWEIGKVITWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKRASTEMVT  
PVTWMDNPIEVYVNDVSVWVPGPIDDRCPAKPEEEGMMINISIGYRYPPICLGRAPGCLMPAVQNWLVVEVPTVSPISRFTYHVMVSGMSLRPRVNYLQD  
FSYQRLKFRPKGKPCPKKIEPKESKNTEVLVWEECVANSVILXNNEFGTIIIDWAPRQGFYHNCSGQTQSCPSAQVSPAVDSLTESLDKHKHKLQ  
SFYFWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHRIWVSGNQTLERDRKPFYITDNLSSLTVPQLQSCVKPPYMLVVGNIIVIKPDSQITC  
ENRLLTCTIDSTFNWQHRIILVRAREGVWIPVMDRPWEASPSVHILTEVLKGVNRSKRFIPTLIIVIMGLIIVTATAAVAGVALHSSVQSVNFVN  
DWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLTLDISKLEQIF  
ASKAHLNLPVGTAEIAGVADGLANLNPVTWVKITIGSTTIINLILILVCLFCLLLVCRCTQQLRRSDHRRERAMTMAVLSKRKGGNVGSKRDQIVT  
VSV

**SEQ ID 28**

MNPSEMQRKAPRRRRHRNRAPLTHKMNKMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPESMLLAALMIVSMVSLPMPAGAA  
AANYTYWAYVPFPLIRAVTWMDNPTEVYVNDVSVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVVEVPTVSPICRFTY



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HMVSGMSLRPRVNYLQDFSYQSRSLKFRPKGKPCKEIPKESKNTTEVLVWEECVANSVILQNNFEGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV  
DSDLTESLDKHKHKLQSFYPWEWEGKISTPRPKIVSPVSGPEHPLELWRLTVASHHRIWWSGNQTLTDRDRKPFYITDLNSSLTVPQLQSCVKPPYM  
LVVGNIVIKPDSQITCENCRLLTCIDSTFNWQHRILLVRAREGVWIPVSMRDPWEASPSVHILTEVLKGVNLNRKRFIFTLIAVIMGLIAVTATAA  
VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRIMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR  
EDNLTLDISKLEQIFEASKAHLNLVPGTEAIAGVADGLANLNPVTWVKITGSTTIINLILILVCLFCLLLVCRCTQQLRRDSHRERAMMTMAVLS  
KRKGGNVGKSKRDQIVTVSV

**SEQ ID 29**

AGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAA  
TGGTGACGTGAGAAGACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCGCAACTTGGGCACAATAAAGAAGCTGACGCAGTTAGCTACAAA  
ATATCTAGAGAACACAAAGGTGACACAAACCCAGAGAGTATGCTGCTGCAGCCTTGATGATTGATCAATGGTGTAAGTCTCCCTATGCCTGCA  
GGA

**SEQ ID 30**

TCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGA

**SEQ ID 31**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVSAGVPNSSEE  
TATIENGP

**SEQ ID 32**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

**SEQ ID 33**

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 34**

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDGGFVKKRGGYVRKREIRLSLCLCRKGRHKKLHFVLY

**SEQ ID 35**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVILQVYPTAPKRQRPSTGHDDGGFVEK  
KRCKGCEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 36**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSTGHDDGGFVEKKRGK  
CGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 37**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVYPTAPKRQ  
PSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 38**

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 39**

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 40**

MEYKNRHLKFYNEPIGDAKKRASTEMSAGVPNSSEETATIENGP

**SEQ ID 41**

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 42**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

**SEQ ID 43**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVSAGVPNSSEE  
TATIENGP

**SEQ ID 44**

MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCAPKPEEEGMMINISIVRYPPICLGRAPGCLMPAVQNCLOVYPTAPKRQRPSTGHDDGGFVEKKR  
GKCGEKQERSDCYCVCVERSRRRLHFVLY

**SEQ ID 45**

MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCAPKPEEEGMMINISIGLOVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVCVERSRR  
RLHFVLC

**SEQ ID 46**

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDGGFVKKRGGYVRKREIRLSLCLCRKGRHKKLHFDLY

## SEQ ID 47

MNSLEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLSSTKKAEPPTWAQLKKLTQLATKYLENTKVQTQTPESMLLAALMIVSMVVS LMPAGAA  
AANYTYWAYVFPPLIRAVTWMDNPTEVYVNDVSVVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNLWEVPTVSPICRFTY  
HMSAGVPNSSEETATIENG

## SEQ ID 48

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTLQVYPTAPKRQRPSTGHDDDDGGFVEK  
KRGKCGEKQERSDCYCVCVERSRRRLHFVMY

## SEQ ID 49

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSTGHDDDDGGFVEKKRGK  
CGEKQERSDCYCVCVERSRRRLHFVMY

## SEQ ID 50

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYXLENTKVQTQTPESMLLAALMIVSMVYPTAPKRQ  
RPSRTGHDDDDGGFVEKKRGKCGEKQERSDCYCVCVERSRRRLHFVMY

## SEQ ID 51

GCCGCGGAATTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTATATTTGGCTCATGTCCAATATGACCGCCATGTTGA  
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAACTTACGGTAAATG  
GCCCCCTGGCTGACCGCCCAACGACCCCCGCCATTGACGTCATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCATTGACGTC  
ATGGGTGGAGTATTTACGGTAAACTGCCACTTGGCAGTACATCAAGTGATCATATGCCAAAGTCCGCCCCCTATTGACGTCATGACGGTAAATGG  
CCGCGCTGGCATTATGCCCATGACGTACGCTTACGGGACTTTCTACTTGGCAGTACATCTACGTATTAGTCATCGCTATTACCATGGTGATCGCGT  
TTTGGCAGTACACCAATGGGCGTGGATAGCGGTTTGACTACGCGGGATTTCGAAGTCTCCACCCCATGACGTCATGGGAGTTTGTTTTGGCACC  
AATCAACGGGACTTTCAAAATGTCTAATAACCCCGCCCCGTTGACGCAATGGGCGGTAGGCGTGTACGGTGGGAGGCTCTATATAAGCAGAGCT  
CGTTTAGTAACCGTCAGATCGCTGGAGACGCCATCCAGCGTGTGTTGACCTCCATAGAAGACACCGGGACCGATCCAGCCTCCGCGCGCGGGAAC  
GGTGCAATTGGAAACGCGGATTCCCGGTGCCAAGAGTGACGTAAGTACCGCTATAGACTCTATAGGCACACCCCTTTGGCTCTTATGCATGCTATACT  
GTTTTTGGCTTGGGCGCTATACACCCCGCTTCTTATGCTATAGGTGATGGTATAGCTTAGCCTATAGGTGTGGGTATTGACCATATTGACCAC  
TCCCTATTGGTGACGATACCTTCCATTACTAATCCATAACATGGCTCTTGGCACAATCTCTATTGGCTATATGCCAATACTCTGTCTTCAG  
AGACTGACACGGACTCTGTATTTTACAGGATGGGGTCCCATTTATTTTACAAATTCACATATACAACAACGCGTCCCCCGTGGCCGCGAGTTTT  
TATTAACATAGCTGGGATCTCCACGCGAATCTCGGGTACGTGTTCCGGACATGGGCTCTTCTCCGGTAGCGGCGGAGCTTCCACATCCGAGCCCT  
GGTCCCATGCTCCAGCGGCTCATGGTCTGCTCGGAGCTCCTTGTCTTAACAGTGGAGGCCAGACTTAGGCACAGCACAATGCCACCACCCAG  
TGTGCGGCACAAGCGCTGGCGGTAGGGTATGTGTCTGAAATGAGCTCGGAGATTGGGCTCGCACCGCTGACGCAGATGGAAGACTTAAGGCAGCG  
GCAGAAGAAGATGCAGGCAGCTGAGTTGTTGTATTTCTGATAAGAGTCAGAGGTAATCCCGTTCGCGGTGCTGTTAACGGTGGAGGGCAGTGAGTCT  
GAGCAGTACTCGTTGCTGCCGCGCGGCCACCAGACATAATAGCTGACAGACTAACAGACTGTTCCCTTTCCATGGGTCTTTTCTGCAGTACCGTCTG  
tcgacgcccacatgaacccagcgagatgcagcgcaaggcccccccccgccgcccgcacccgcaaccgccccccctgaccacagaatgaacaa  
gatggtgaccagcgaggagcagatgaagctcccagcacaagaaggccgagccccccacctgggcccagctgaagaagctgaccagctggccacc  
aagtacctggagaacaccaagtgaccagacccccgagagcagctgctgctggccgcccctgatgatcgtagcagtggtgagcgccgctgcccacaa  
gcagcgaggagacggccaccatcgagaacggccccgcttaagaattcAGACTCGAGCAAGTCTAGAAAGCCATGGATATCGGATCCACTACCGCTT  
AGAGCTCGCTGATCAGCTCGACTGTGCCTTCTAGTTGCCAGCCATCTGTTGTTTGGCCCTCCCGCTGCCCTTCCCTGACCTGGAAGGTGCCACTC  
CCACTGTCTCTTTCTAATAAATGAGGAAATGTCATCGCATTTGCTGAGTAGGTGTCTATTCTATTCTGGGGGTGGGGTGGGGCAGGACAGCAAGGG  
GGAGGATTGGGAAGACAATAGCAGGGGGTGGGCGAAGAACTCCAGCATGAGATCCCGCGCTGGAGGATCATCCAGCGCGCTCCCGGAAAACGAT  
TCCGAAGCCCAACCTTTTCATAGAAGGCGCGGTGGAATCGAAATCTGATGATGCGAGGTTGGGCGTGGCTTGGTGGCTCATTTGCAACCCAGAGTC  
CCGCTCAGAAGAACTCGTCAAGAAGGCGATAGAAGCGATGCGCTGCGAATCGGGAGCGGCGATACCGTAAGCACGAGGAAGCGGTACGCCCATTC  
GCCGCCAAGCTCTTCAGCAATATCACGGGTAGCCAACGCTATGCTCTGATAGCGGTCCGCCACACCAGCCGGCCACAGTCGATGAATCCAGAAAAG  
CGGCCATTTTCCACCATGATATTCCGCAAGCAGGCATCGCCATGGGTACGACGAGATCCTCGCGCTCGGGCATGCGCGCTTGAGCCTGGCGAACA  
GTTCCGCTGGCGCGAGCCCCGATGCTCTTCTGTCAGATCATCTGATCGACAAGACCGGCTTCCATCCGAGTACGTGCTGCTCGATGCGATGTTT  
CGCTTGGTGGTCCAATGGCAGGTAGCCGATCAAGCGTATGACGCCGCGCATTTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGA  
GATGACAGGAGATCCTGCCCCGCACTTCGCCCAATAGCAGCCAGTCCGCTTCCCGCTTCAGTGACAACGTCGAGCACAGCTGCGCAAGGAACGCCCCG  
TCGTGCCAGCCACGATAGCCGCGCTGCCTCGTCTGCAGTTCATTACGGGCACCGGACAGGTGCGTCTTGACAAAAGAACCGGGCGCCCCCTGCGC  
TGACAGCCGGAACACGGCGCATCAGAGCAGCGATTGTCTGTTGTGCCAGTCATAGCCGAATAGCCTCTCCACCAAGCGCGGAGAACCTGCG  
TGCAATCCATCTTGTCAATCATGCGAAACGATCTCATCTGTCTTGTATCAGATCTTGATCCCTGCGCCATCAGATCCTTGCGGCAAGAAAG  
CCATCCAGTTTACTTTGAGGGCTTCCCAACCTTACCAGAGGGCGCCCCAGCTGGCAATCCGGTTGCGTTGCTGTCCATAAAACCGCCAGCTAG  
CTATCGCCATGTAAGCCCACTGCAAGCTACCTGCTTTCTCTTTCGCTTTCGCTTTTCCTTGTCCAGATAGCCAGTAGCTGACATTCATCCGGGT  
CAGCACCGTTTCTGCGGACTGGCTTTCTACGTGTTCCGCTTTCCTTTAGCAGCCCTTGGCGCTGAGTGCTTGGCGCAGCGTGAAGCTAATTATGGT  
TAAATTTTGTAAATCAGCTCATTTTAAACCAATAGGCCGAATCGGCAAAATCCCTTATAAATCAAAGAATAGCCCGAGATAGGGTTGAGTGT  
TGTTCCAGTTTGGAAACAAGAGTCCACTATTAAGAAGCTGGAGCTCAAGCTCAAAGGCGGAAAACCGTCTATCAGGGCGATGGCCGATCAGCTTA  
TGCGGTGTGAAATACCGCAACAGATGCGTAAGGAGAAATACCGCATCAGGCGCTTCCGCTTCTCGCTCACTGACTCGCTGCGCTCGGTGCTCG  
GCTGCGGCGAGCGGTATCAGCTCACTCAAAGGCGGTAATACGGTTATCCACAGAATCAGGGGATAACGCAGGAAAGAACATGTGAGCAAAAGGCCAG  
CAAAGGCCAGGAACCGTAAAGGCCGCGTGTGCGGCTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAATCGACGCTCAAGTCAGA  
GGTGCGGAAACCGACAGGACTATAAGATACAGGCGTTTCCCTTGAAGCTCCCTCGTGGCTCTCTCTGTTCCGACCTGCGGCTTACCGGATA

CCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCTGTTCCGTTCCAAGCTGGGC  
TGTGTGCACGAACCCCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAAGTCCAACCCGGTAAGACACGACTTATCGCCACTGG  
CAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGCGGTGTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGGAC  
AGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAGAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGT  
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**SEQ ID 52**

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**SEQ ID 53**

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**SEQ ID 54**

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14/25

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**SEQ ID 55**

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**SEQ ID 56**

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**SEQ ID 57**

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**SEQ ID 58**

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**SEQ ID 59**

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**SEQ ID 60**

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**SEQ ID 61**

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TCAAATTCGTCACTTAAAAAGAAATGCCCCAGTCTTAAATAAACAGAAATATACTATTCAAGCAACTACACAGGTAGAGAGCCACCTGACTTATGT  
CCAAGATGTAAGAAAGGAAAACATTGGGCTAGTCAATGTCGTTCTAAATTTGATAAAAAATGGGCAACCATTTGTCGGGAAACGAGCAAAGGGGCCAGC  
CTCAGGCCCCACAACAACTGGGGCATTCCCAATTCAGCCATTGTTTCTCAGGGTTTTTCAGGGACAACAACCCCCACTGTCCCAAGTGTTCAGGG  
AATAAGCCAGTTACCACAATACAACATTTGTCCTCCCGCCACAAGCGGCAGTGACAGTAG

**SEQ ID 62**

ATGGGCCAGACCAAGAGCAAGATCAAGAGCAAGTACGCCAGCTACCTGAGCTTCATCAAGATCCTGCTGAAGCGCGGGCGGTGAAGGTGAGCACCA  
AGAACCTGATCAAGCTGTTCCAGATCATCGAGCAGTTCTGCCCTGGTTCCCGAGCAGGGCACCCTGGACCTGAAGGACTGGAAGCGCATCGCA  
GGAGCTGAAGCAGGCGCGCGCAAGGGCAACATCATCCCCCTGACCGTGTGGAACGACTGGGCCATCATCAAGGCGCCCTGGAGCCCTTCAGACC  
GAGGAGGACAGCGTGAGCGTGAGCGACGCCCCGGCAGCTGCATCATGACTGCAACGAGAACCCCGCAAGAAGAGCCAGAAGGAGACCGAGGGCC  
TGCCTGCGAGTACGTGGCCGAGCCCGTGATGGCCAGAGCACCAGAACCTGGACTACAACCAGCTGCAGGAGGTGATCTACCCCGAGACCCTGAA  
GCTGGAGGGCAAGGGCCCCGAGCTGTTGGGCCCCAGCGAGGCAAGCCCCGCGGCACAGCCCCCTGCCCGCCGCGCAGGTGCCCGTGACCCCTGCAG  
CCCCAGAAGCAGGTGAAGGAGAACAAGACCCAGCCCCCGTGGCTACCACTGAGTGGCCCCCGCGAGCTGCAGTACCGCCCCCCCCCGAGAGCC  
AGTACGGCTACCCCGGCATGCCCCCGCCCCAGGGCCGCGCCCCCTACCCCGAGCCCCCACCGCGCGCTGAACCCACCGCCCCCCCCAGCCG  
CCAGGGCAGCAAGCTGCACGAGATCATCGACAAGAGCCGAAGGAGGGCGACACCGAGGCCGAGGCTGAGCTTCCCGTGACCTGGAGCCCATGCCCC  
GGCGAGGGCGCCAGGAGGGCGAGCCCCACCGTGGAGGCCCTACAAGAGCTTCAGCATCAAGAAGCTGAAGGACATGAAGGAGGGCGTGAAGC  
AGTACGGCCCCAACAGCCCCATATCGCACCCCTGCTGGACAGCATCGCCCCAGGCCACCGCTGATCCCCCTACGACTGGGAGATCTTGGCCAAAGAG  
CAGCCTGAGCCCCAGCCAGTTCTGCAAGTCAAGACCTGGTGGATCGACGGCGTGACGAGGAGGTCGCGCGCAACCGCGCCGCAACCCCCCGTG  
AACATCGACGCGGACAGCTGCTGGGCATCGGCCAGAATGGAGCACCATCAGCCAGCAGGCCCTGATGCAGAACGAGGCCATCGAGCAGGTGCGCG  
CCATCTGCTGCGCGCTGGGAGAAGATCCAGGACCCCGCAGCAGCTGCCAGCTTCAACACCGTGCGCCAGGGCAGCAAGGAGCCCTACCCCGA  
CTTCGTGGCCCGCTGCAGGACGTGGCCCAAGAGCATCGCCGACGAGAAGGCCGCAAGGTGATCGTGGAGCTGATGGCCTACGAGAACGCCAAC  
CCCGAGTGCCAGAGCGCCATCAAGCCCCGTAAGGGCAAGGTGCCCGCCGCGCAGCGACGTGATCAGCGAGTACGTGAAGGCTGCGACGGCATCGGCG  
GCGCCATGCACAAGGCCATGCTGATGGCCAGGCCATCACCGCGTGGTGCTGGGCGGCCAGGTGCGCACCTTCGCGCGCAAGTGCTACAATGCGG  
CCAGATCGGCCACCTGAAGAAGAACTGCCCCGTGCTGAACAAGCAGAACATCACCATCCAGGCCACCACCACCGGCCGCGAGCCCCCGACCTGTGC  
CCCCGCTGCAAGAAGGGCAAGCACTGGGCCAGCCAGTGGCCGAGCAAGTTGACACAAGAACGGCCAGCCCCGAGCGGCAACGAGCAGCGCGCCAGC  
CCCAGGCCCCCCCAGCAGACCGCGCCTTCCCCATCCAGCCCTTCGTGCCCCAGGGCTTCCAGGGCCAGCAGCCCCCTGAGCCAGGTGTTCCAGGG  
CATCAGCCAGCTGCCCCAGTACAACAACCTGCCCCCCCCCAGCGCGCGTGCAGCAGGCTTAA

**SEQ ID 63**

ATGTGGGAACCATTTGTCGGGAAACGAGCAAGAGGGCCAGCCTCAGGCCCCACAACAACCTGGGGCATTCCTAATTGAGCCATTGTTCTCAGGGT  
TTTCAGGGACAACAACCCCACTGTCCCAAGTGTTCAGGGAATAAGCCAGTTACCACAATAACAATTTGTCCTCCGCAAGCGGCAGTGCAGC  
AGTAGATTTATGTACTATACAAGCAGTCTCTGCTTCCAGGGGAGCCCCACAAAAACCCCAAGGGGTATATGGACCCCTGCCTAAGGGGACT  
GTAGACTAATCTTGGGACGATCAAGTCTAAATCTAAAAGGAGTTCAAATTCATACTAGTGTGGTTGATTGAGACTATAAAGGGCAAAATCAATTGG  
TTATTAGCTCTTCAATTCCTTGGAGTGCCAGTCCAAGAGACAGGATGCTCAATTATTACTCTGCCATACATTAAAGGTGGAATAGTGAATAAA  
AAGAATAGGAGGGCTTGAAGCACTGATCCAACAGGAAAGGCTGCATATTGGGCAAGTCAGGTCTCAGAGAACAGACCTGTGTGAAGGCCATTATT  
CAAGGAAAACAGTTTGAAGGGTTGGTAGACTGGAGCAGATGCTCTATTGCTTTAAATCAGTGGCCAAAAATTTGGCCTAAACAAAAGGCTG  
TTACAGGACTTGTGCGCATAGCCCTCAGAGTGTATCAAAGTACGAGATTTTACATTGCTTAGGGCCAGATAATCAAGAAAGTACTGTTCA  
GCCAATGATTACTTCAATTCTCTTAATCTGTGGGTGAGATTATTACAACAATGGGGTGCAGAAATCACCATGCCCCCTCCATCATATAGCCCC

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ACGAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGGACTAGGGAAAAATGAAGATGGCATTAAAAATTCAGTTGAGGCTAAAAATA  
ATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAG

**SEQ ID 64**

ATGTGGGCCACCATCGTGGGCAAGCGCGCCAAGGGCCCCGCCAGCGGCCACCACCAACTGGGGCATCCCCAACAGCGCCATCTGCAGCAGCGGGCT  
TCAGCGGCACCAACCCCCACCGTGCCAGCGTGAGCGGCAACAAGCCCGTGACCACCATCCAGCAGCTGAGCCCCGCCACCGCGCAGCGCCGC  
CGTGGACCTGTGCACCATCCAGGCGGTGAGCCTGCTGCCCGCGAGCCCCCAGAAGACCCCCACCGCGGTGTACGGCCCCCTGCCAAGGGCACC  
GTGGGCTGATCCTGGGCGCAGCAGCCTGAACCTGAAGGGCGTGACAGTCCACACCAGCGTGGTGGACAGCGACTACAAGGGCGAGATCCAGCTGG  
TGATCAGCAGCAGCATCCCCGTGAGCGCCAGCCCCCGGACCGCATCGCCAGCTGCTGCTGCTGCCCTACATCAAGGGCGGCAACAGCGAGATCAA  
GGCATCGGGCGGCTGGGAGCACCAGCCCCACCGGCAAGGCCGCCCTACTGGGCCAGCCAGGTGAGCGAGAACCGCCCCGTGTGCAAGGCCATCATC  
CAGGGCAAGCAGTTCGAGGGCCTGGTGGACACCGCGCGGACGTGAGCATCATCGCCCTGAACAGTGGCCCAAGAACTGGCCCAAGCAGAAGGCCG  
TGACCGGCTGGTGGGCATCGGCACCGCCAGCGAGGTGTACAGAGCACCAGATCTGCACTGCCTGGGCCCCGACAACAGGAGAGCACCCTGCA  
GCCCATGATCACCAGCATCCCCCTGAACCTGTGGGGCGCGACCTGCTGCAGCAGTGGGGCGCGGAGATCAACATGCCCGCCCCAGCTACAGCCCC  
ACCAGCCAGAAGATCATGACCAAGATGGGCTACATCCCCGCAAGGGCCTGGGCAAGAACGAGGACGGCATCAAGATCCCCGTGGAGGCCAAGATCA  
ACCAGGAGCGCGAGGGCATCGGCAACCCCTGCGCTTAA

**SEQ ID 65**

ATGAATAAATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAGGGGCGGCCACTGTAGAGCCTCCTAAACCCATACCATTAACTTGGAAAACAGAAA  
AACCAGTGTGGGTAAATCAGTGGCCGCTACCAAAACAAAACCTGGAGGCTTTACATTTATTAGCAAATGAACAGTTAGAAAAGGGTCATATTGAGCC  
TTCTGTTCTCACCTTGAATCTCCTGTGTTTGAATTCAGAAAGAAATCAGGCAAAATGGCGTATGTTAACTGACTTAAGGGCTGTAAACGCCGTAAAT  
CAACCCATGGGGCTCTCCAACCCGGGTGCCCCCTCCGCGCATGATCCCAAGATTGGCCTTAAATTATAATTGATCTAAAGGATTGCTTTTTTA  
CCATCCCTCTGGCAGAGCAGGATTGCGAAAAATTTGCCTTTACTATACCAGCCATAAATAATAAAGAACCCAGCCACCGGTTTCAGTGGAAAGTGTT  
ACCTCAGGGAATGCTTAATAGTCCAATATTGTGACACTTTTGTAGGTCGAGCTCTTCAACAGTTAGAGAAAAGTTTCAGACTGTTATATTATT  
CATTGTATTGATGATATTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGG  
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TACTGATCTTGTGGAGTGGTCATTCTCTCAGTACAGTAAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAAATCGGTGAGACAAGA  
TTACGAATAATAAAATATGTGGGAATGACCCAGACAAAATAGTTGTCCTTTAACCAAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCAT  
GGAAGATTGGTCTTGCTAATTTTGTGGGAATTAATTGATAATCATTACCAAAAACAAAGATCTTCCAGTTCTTAAATTGACTACTTGGATTCTACC  
TAAATTTACCAGACGTGAACCTTTAGAAAATGCTCTAACAGTATTACTGATGGTTCAGCAATGGAAAAGCAGCTTACACAGGACCGAAGAACGA  
GTAATCAAAACTCCATATCAATCGGCTCAAAGAGCAGAGTTGGTTGCAGTCATTACAGTGTACAAGATTTTGACCAACCTATCAATATTATACAG  
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GAGACATCGAATCGAGCACCCTGTGACTCACAAGATGAACAAAATGTTGACGTCAGAAGAACAGATGAAGTTGCCATCCACCAAGAGGACAGCCG  
CCAACCTTGGGCACAACTAAAGAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACACAAGGTGACACAAACCCAGAGAGTATGCTGCTTGACG  
CCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

**SEQ ID 66**

ATGAACAAGAGCCGCAAGCGCGCAACCGGAGAGCCTGCTGGGCGCCGCCACCGTGGAGCCCCCAAGCCCATCCCCCTGACCTGGAAGACCGAGA  
AGCCCGTGTGGGTGAACAGTGGCCCCTGCCCAAGCAGAAGCTGGAGGCCCTGCACCTGCTGGCCAACGAGCAGCTGGAGAAGGGCCACATCGAGCC  
CAGCTTCAGCCCCGTGAACAGCCCCGTGTCGTGATCCAGAAGAAGAGCGGCAAGTGGCGCATGCTGACCGACCTGCGCGCCGTGAACGCCGTGATC  
CAGCCCATGGGCCCCCTGAGCCCGGCTGCCAGCCCGCATGATCCCAAGGACTGGCCCTGATCATCATGACCTGAAGGACTGCTTCTTCA  
CCATCCCCCTGGCCGAGCAGGACTGCGAGAAGTTGCGCTTACCATTCCCGCCATCAACAACAGGAGCCCCGCCACCCGCTTCAGTGGAAAGGTGCT  
GCCCCAGGGCATGCTGAACAGCCCCACCATCTGCCAGACCTTCGTGGGCGCGCCCTGCAGCCCGTGCAGGAGAGTTTCAGCGACTGCTACATCATC  
CACTGCATCGACGACATCTGTGCGCCCGGAGACCAAGGACAAGCTGATCGACTGCTACACCTTCTGCGAGGCGGAGGTGGCCAAACGCCCGCTGG  
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CAAGGACACCTGAAGACCTGAAACGACTTCAGAAAGCTGCTGGGCGACATCAACTGGATCCGCCCCACCTGGGGATCCCCACCTACGCCATGAGC  
AACCTGTTTCAGCATCTGCGCGGCGACAGCGACCTGAACAGCAAGCGCATGCTGACCCCCGAGGCCACCAAGGAGATCAAGCTGGTGGAGGAGAGA  
TCCAGAGCGCCAGATCAACCGCATCGACCCCTGGCCCCCTGCAGTGTCTGATCTTCGCCACCGCCACAGCCCCACCGGCATCATCATCGAGAA



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CACCGACCTGGTGGAGTGGAGCTTCTGCCCCACAGCACCGTGAAGACCTTACCCTGTACCTGGACCAGATCGCCACCCTGATCGGCCAGACCCGC  
CTGCGCATCATCAAGCTGTGCGGCAACGACCCCGACAAGATCGTGGTGGCCCTGACCAAGGAGCAGGTGCGCCAGGCCCTCATCAACAGCGCGCCT  
GGAAGATCGGCCTGGCCAACTTCGTGGGCATCATCGACAACCACTACCCCAAGACCAAGATCTTCCAGTTCCTGAAGCTGACCACCTGGATCCTGCC  
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GCAGACCGTGCAGCAAGCGCAACTTCCCTTCTACATCACCCACATCCGCGCCACACCAACCTGCCCGGCCCTGACCAAGGCCAAGGAGCAGGCC  
GACCTGCTGGTGGAGCAGCGCCCTGATCAAGGCCAGGAGCTGCACGCCCTGACCCAGCTGAACCGCCGCGCTGAAGAACAAGTTCGACGTGACCT  
GGAAGCAGGCCAAGGACATCGTGCAGCACTGCACCCAGTGCCAGGTGCTGCACCTGCCACCCAGGAGCGCGCTGAACCCCGCGGCCCTGTGCC  
CAACGCCCTGTGGCAGATGGACGTGACCCACGTGCCAGCTTCGGCCGCTGAGCTACGTGCACGTGACCGTGGACACCTACAGCCACTTCATCTGG  
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ACGGCCCCCGCTACTGCAGCAAGGCCCTCCAGAAGTTCCTGAGCCAGTGAAGATCAGCCACACCACCGGCATCCCTTACAACAGCCAGGGCCAGGC  
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ACGAGGGCAAGCTGATCTGGTGAAGGACAACAAGAACAAGACCTGGGAGATCGGCAAGGTGATCACCTGGGGCCGCGCTTCGCTGCGTGGAGCC  
CGGCGAGAACCAGTGGCCGTGTGGATCCCCACCGCCACCTGAAGTTCACAACAGGCCATCCGCGACGCCAAGAAGAGCACCAGCGCCGAGACC  
GAGACAGCCAGAGCAGCACCCTGGACAGCCAGGACGAGCAGAACGGCGACGTGCGCCGACCGACGAGTGGCCATCCACCAGGAGGGCCGCGCCG  
CCAACCTGGGACCAACCAAGGAGCGGACGCCGTGAGCTACAAGATCAGCCGCGAGCACAAGGGCGACACCAACCCCGCGAGTACGCCGCTGCAG  
CCTGGACGACTGCATCAACGGCGGCAAGAGCCCCCTACGCTGCCGACGAGCTGCAGCGCTTA

**SEQ ID 67**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPEMMLLAALMIVSMVSAGVNSSEE  
TATIENGPA

**SEQ ID 68**

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPEMMLLAALMIVSMVYPTAPKRQR  
PSRTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFLVYA

**SEQ ID 69**

MGQTKSKISKYASYLSFIKILLKRGVVKVSTKNLIKLFQIIEQFCWFPEQGTLDLKDWKIRIGKELKQAGRKGNIIPLTVWNDWAIKAALEPFQT  
EEDSVSVSDAPGSCIIDCNENTRKKSKQETEGHLHCEYVAEPVMAQSTQNVNDYNQLQEVIIYPETLKLEGKPELVGPSESKPRGTSPLPAGQVPVTLQ  
PQKQVKENKTQPPVAYQYWPAPLQYRPPESQYGYPMPPAPQGRAPYQPPTRRLNPTAPPSRQSKLHEIIDKSRKEGDEAWQFPVTLPEMPP  
GEGAQEGEPPTVEARYKSFISIKLLKDMKEGVKQYGPNSPYMRTLDSIAHGRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRANPPV  
NIDADQLLGIGQNWSTISQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADKARKVIVELMAYENAN  
PECQSAIKPLKGVKVPAGSDVISEYVKACDGIIGAMHKAMLAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNQNITIQATTGREPPDLC  
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFFIQPFVPOGFGQQPPLSQVFQGISQLPQYNNCPPQAQVQQ

**SEQ ID 70**

MGQTKSKISKYASYLSFIKILLKRGVVKVSTKNLIKLFQIIEQFCWFPEQGTLDLKDWKIRIGKELKQAGRKGNIIPLTVWNDWAIKAALEPFQT  
EEDSVSVSDAPGSCIIDCNENTRKKSKQETEGHLHCEYVAEPVMAQSTQNVNDYNQLQEVIIYPETLKLEGKPELVGPSESKPRGTSPLPAGQVPVTLQ  
PQKQVKENKTQPPVAYQYWPAPLQYRPPESQYGYPMPPAPQGRAPYQPPTRRLNPTAPPSRQSKLHEIIDKSRKEGDEAWQFPVTLPEMPP  
GEGAQEGEPPTVEARYKSFISIKLLKDMKEGVKQYGPNSPYMRTLDSIAHGRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRANPPV  
NIDADQLLGIGQNWSTISQALMQNEAIEQVRAICLRAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADKARKVIVELMAYENAN  
PECQSAIKPLKGVKVPAGSDVISEYVKACDGIIGAMHKAMLAQAITGVVLGGQVRTFGRKCYNCGQIGHLKKNCPVLNQNITIQATTGREPPDLC  
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPQAPQQTGAFFIQPFVPOGFGQQPPLSQVFQGISQLPQYNNCPPQAQVQQ

**SEQ ID 71**

MWATIVGKRAKGPASGPTTNWGPNSAICSSGFSGTTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT  
VGLILGRSSLNLKGVQIHTSVVSDYKGEIQLVISSIPWSASPRDRIAQLLLLPYIKGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII  
QGKQFEGLVDTGADVSIIALNQWPKNWPQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQWGAETMPAPSYS  
TSQKIMTKMGIIPGKGLGKNEDGIKIPVEAKINQEREGINPC

**SEQ ID 72**

MWATIVGKRAKGPASGPTTNWGPNSAICSSGFSGTTTTPTVPSVSGNKPVTTIQQLSPATSGSAAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT  
VGLILGRSSLNLKGVQIHTSVVSDYKGEIQLVISSIPWSASPRDRIAQLLLLPYIKGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII  
QGKQFEGLVDTGADVSIIALNQWPKNWPQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQWGAETMPAPSYS  
TSQKIMTKMGIIPGKGLGKNEDGIKIPVEAKINQEREGINPCA

**SEQ ID 73**

MNKSRRNRRESLLGAATVEPPKPIPLTWKTEKPVVWNQWPLPKQKLEALHLANEQLEKGHIEPSFSPWNSPVFVIQKKSQKWRMLTDLRAVNAVI  
QPMGLPQGLPSAMIPKDWPLIIIDLKDCFTIPLAEQDCEKFAFTIIPAINNKEPATRFQWKVLPQGMNLSPPTICQTFVGRALQPVREKFSDCYII  
HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFPHYLMQIENRKIKPKQIEIRKDTLKTLDNFQKLLGDINWIRPTLGIPTYAMS  
NLFSILRGSDSLNSKRLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIQNTDLVEWSFLPHSTVKTFTTLYLDQIATLIGQTR

LRRIKLCGNDPDKIVVPLTKEQVRQAFINSQAWKIGLANFVGIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTVFTDSSNGKAAAYTGPKER  
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVOATRDVETALIKYSMDQLNLQFLNLLQQTVRKRNFPPFYITHRAHTNLPGLPTKANEQA  
DLLVSSALIKAQELHALTHVNAAGLKNKFDVTWKQAKDI VQHCTQCQVLHLPTQEAGVNPRLCPNALWQMDVTHVPSFGRLSYVHVTVDTYSHFIW  
ATCQTEGSTSHVKKHLLSCFAVMGVPKIKITDNGPGYCSKAFQKLSQWKISHTTGIPIYNSQQAIVERTNRTLKTQLVKQKEGSDSKECTTPQMQL  
NLALYTLNFLNIYRNQYTLTSAEQHLTKGKNSPHEGLIKWFKDNKNKTWELGKVTWGRGACVSPGENLPWPIPTHLKFEYNPIRDAKKSAT  
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSCS

MNKSRRNRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHIEPSFSPWNSPVFIQKSGKWRMLTDLRAVNAVI  
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HCIDDILCAAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTPPHYLGMQIENRKIKPKQKIEIRKDTLKTNLDFQKLLGDINWIRPTLGIPTYAMS  
NLSFILRGSDSLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIIFATAHSPGTGIIIQNTDLVIEWSFLPHSTVKTFITLYLDQIATLIQCTR  
LRIIKLCGNODPKIVVPLTKEQVRQAFINSAGWKIGLANFVGIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTVFTDGSSNGKAAYTGPKER  
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDQLNLQFLNLLQQTVRKRNFFFYITHIRAHNTLPGPLTKANEQA  
DLLVSSALIKQELHALLTHVNAAGLNKFDVTWKQAKDVIQHCQTCQVLHLPTQEAGVNPRLGCNALWQMDVTHVPSFGRLSVHVHTVDTYSHFIV  
ATCQTEGSTSHVKHLLHSCFAVMGVEKIKTDNKGPGYCSAKFQCLPSQWKISHTTGPIYNSGQCAIVERTNRLTKTLQVLQKQEGGDSKECTTPQMQL  
NLALYTLNLFNLIYRNQTTTSAEQHLTGKKNSEHEGLKIWWKDNKNKTWIEIGKVTIWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKSTSAET  
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